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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,319	10/03/2000	Robert P. Siegel	105715	4804
7590 10/20/2003			EXAMINER	
OLIFF & BERRIDGE, PLC P. O. BOX 19928 ALEXANDRIA, VA 22320			BARBEE, MANUEL L	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/678,319

Applicant(s)

SIEGEL ET AL.

Examiner

Manuel L. Barbee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) 2,4-9,11-17,19,24-27,29-31,33,37 and 39-44 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 2,4-9,11-17,19,24-27,29-31,33,37 and 39-44 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 4, 5, 19, 25, 27, 33, 37 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill, Jr. et al. (US Patent No. 5,057,866) in view of Draeger et al. (US Patent No. 5,371,692)

With regard to collecting and processing data, as shown in claims 4, 19, 33 and 44, Hill, Jr. et al. teaches logging events and physical data in a copier (col. 4, lines 6-37; Figure 3, log file 158, physical data file 185). With regard to obtaining an initial diagnosis and sending the data over a distributed network based on the initial diagnosis, as shown in claims 4, 19, 33 and 44, Hill, Jr. et al. teach comparing the data to thresholds and sending data to a remote computer if necessary (col. 6, lines 9-31; col. 4, line 47 - col. 5, line 4). With regard to a remote diagnostic system, as shown in claims 4, 19 and 33 Hill, Jr. et al. teach a remote computer that further analyzes the collected data (col. 6, lines 9-48).

Hill, Jr. et al. do not teach sending a communication that includes repair information or a revised set of operating instructions that are at least one of correcting a failure and preventing a failure of the at least one electronic system, as shown in claims 4, 19, 25, 33 and 44. Draeger et al. teach activating or adding new capabilities to an

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electronic device (col. 3, lines 64-68; col. 4, line 48 - col. 5, line 28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the copier calculator, as taught by Hill, Jr. et al., to include adding new capabilities, as taught by Draeger et al., because then bugs would have been corrected and new features would have been added to the electronic device (Draeger et al., col. 1, lines 35-64).

With regard to threshold analysis, as shown in claim 2 and 27, Hill, Jr. et al. teach comparing the collected data to thresholds (col. 6, lines 9-31). With regard to transmitting data over a distributed network, as shown in claims 5 and 37, Hill, Jr. et al. teach sending data over a modem to another computer for further processing (col. 4, lines 47-55).

3. Claims 6-9, 29-31, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill, Jr. et al. in view of Abbata et al. (US Patent No. 6,268,733).

Hill, Jr. et al. teach all the limitations of claim 1 upon which claims 6-9 depend, claim 18 upon which claims 22 and 29-31 depend, claim 32 upon which claims 40 and 41 depend, and claim 33 upon which claim 36 depends. Hill, Jr. et al. further teach a remote diagnostic system, as shown in claims 6, 7 and 31. Hill, Jr. et al. do not teach detecting a signature waveform and digitizing, as shown in claims 6, 29, 30, 40 and 41. Hill, Jr. et al. do not teach analyzing the waveform, as shown in claims 7-9 and 31.

Abbata et al. teach a field service instrument that measures current and digitizes the current for analysis by comparison with a baseline current waveform (col. 5, line 28 - col. 7, line 13). It would have been obvious to one of ordinary skill in the art at the time

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the invention was made to modify the copier calculator, as taught by Hill, Jr. et al., to include current signature analysis, as taught by Abbata et al., because then faults would have been detected in a simple manner before actual failure (Abbata et al. col. 1, line 32 - col. 2, line 12).

4. Claims 11, 12, 16, 17, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbata et al. in view of Hill, Jr. et al.

With regard to at least one sensor that detects a signature waveform and a signature analysis circuit, as shown in claim 11, and receiving and analyzing a signature waveform, as shown in claims 42 and 43, Abbata et al. teach measuring the current waveform of a photographic machine and comparing the waveform to a baseline waveform (col. 5, line 28 - col. 7, line 13). Abbata et al. do not teach a remote diagnostic system, as shown in claims 11, 12, 16, 17 and 42. Abbata et al. do not teach sending a revised set of operating instructions, as shown in claim 16, or using a distributed network, as shown in claim 17.

Hill, Jr. et al. teach a remote diagnostic system (col. 6, lines 9-48). Hill Jr. teach using a modem to send new thresholds to the copier (6, lines 9-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system for analyzing a ink jet, as taught by Kennedy et al., to include a remote computer for analysis, as taught by Hill, Jr. et al., because then it would not have been necessary for a technician to be on site for all repairs (Hill, Jr. et al., col. 1, lines 5-66).

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5. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbata et al. in view of Hill, Jr. et al. as applied to claims 11 and 12 above, and further in view of Kennedy et al.

Abbata et al. and Hill, Jr. et al. teach all the limitations of claims 11 and 12 upon which claims 13 and 15 depend. Abbata et al. and Hill, Jr. et al. do not teach sending repair information to a third party or a service request notification, as shown in claims 13 and 15. Kennedy et al. teach marking an inkjet head for service (col. 5, lines 49-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the copier calculator combination, as taught by Abbata et al. and Hill, Jr. et al., to include marking a part for repair, as shown in Kennedy et al., because then the repair person would have been able to quickly repair the necessary parts.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abbata et al. in view of Hill, Jr. et al. as applied to claims 10-12 above, and further in view of Rosenbaum et al (US Patent No. 6,584,430).

Kennedy et al. and Hill, Jr. et al. teach all the limitations of claims 10-12 upon which claim 14 depends. Abbata et al. and Hill, Jr. et al. do not teach sending a parts request from the remote diagnostic system, as taught in claim 14. Rosenbaum teach remotely monitoring an analysis device and ordering a component when needed (col. 1, lines 45-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the analysis system combination, as taught by Abbata et al. and Hill, Jr. et al., to include ordering parts, as taught by Rosenbaum et al., because

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then it would not have been necessary for a technician to be on site for all repairs (Hill, Jr. et al., col. 1, lines 5-66).

7. Claims 24, 26 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill, Jr. et al in view of Draeger et al. as applied to claims 19, 25 and 33 above and further in view of Katzeff (US Patent No. 5,101,491).

Hill, Jr. et al. teach all the limitations of claim 19 upon which claim 24 depends, claims 19 and 25 upon which claim 26 depends and claim 33 upon which claim 39 depends. Hill, Jr. et al. and Draeger et al. do not teach verifying that the revised set of operating instructions is within specification, as shown in claims 24, 26 and 39. Katzeff teaches generating new functions for software in a system and simulating the system to check that the new functions will operate correctly (col. 2, line 52 - col. 3, line 44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the copier calculator, as taught by Hill, Jr. et al., to include verification of newly received instructions, because then proper operation of the revised operating instructions would have been assured.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 4, 6, 11, 19, 33, 42 and 44 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee (US Patent No. 5,347,518) teaches automating a build verification process.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel L. Barbee whose telephone number is 703-308-0979. The examiner can normally be reached on Monday-Friday from 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on 703-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0976.

mlb  
October 6, 2003

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
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